



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/634,416	08/08/2000	Brig Barnum Elliott	99-466	4607

32127 7590 06/28/2005

VERIZON CORPORATE SERVICES GROUP INC.
C/O CHRISTIAN R. ANDERSEN
600 HIDDEN RIDGE DRIVE
MAILCODE HQEO3H14
IRVING, TX 75038

EXAMINER

COLIN, CARL G

ART UNIT PAPER NUMBER

2136

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/634,416

Applicant(s)

ELLIOTT, BRIG BARNUM

Examiner

Carl Colin

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/8/2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. In view of the Appeal Brief filed on 4/4/2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. In response to communications filed on 4/4/2005, the following claims 1-22 are presented for examination.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter

Art Unit: 2136

sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3.1 **Claims 1-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,236,981 to **Hill** in view of US Patent 6,792,438 to **Wells et al.**

3.2 **As per claims 1, 2, 8-10 and 13-14, Hill** substantially teaches a random source comprising of a diode and an amplifier that amplifies noise on a diode to create a random bit stream and also discloses receiving the random bit stream from one input and outputting the random bit stream in a machine-readable form and a processor for formatting the random bit stream into a machine-readable form (column 10, lines 9-37 and column 10, line 64 through column 11, line 8); discloses a plurality of disk files for saving random bits output from the processor (column 10, lines 25-37 and column 10, line 64 through column 11, line 8) and the random bit stream is available to user connected to the server (column 10, line 64 through column 11, line 8). **Hill** discloses the inventive concept of the claimed limitation of claim 1. **Hill** is silent about the details of the circuitry used to generate the random bit stream such as interface between the source and the processor and converting analog to digital signal because these details are not needed for one skilled in the art to know how the data is transferred from one module to the next and if the source is analog and the output is digital there must be a conversion from analog to digital. A more detailed circuitry that discloses interface between the

Art Unit: 2136

processor and the source; memory coupled to the processor for storing machine-readable instructions used by the processor and converting analog to digital signal can also be found in US Patents 6,581,078, Liardet; 5,627,775 Hong et al; 6,234,558, Wilber; 6,792,438 Wells et al. **Wells et al** in an analogous art (figure 3) teaches an input interface (218) coupled to the random source (217) for receiving a random data stream from the random source and outputting the random bit stream; a processor (220) for receiving the random bit stream from the input interface and outputting the random bit stream in a machine-readable form and a processor (220) memory coupled to the processor for storing machine-readable instructions used by the processor (column 3, lines 30-49); a processor for formatting the random bit stream into a machine-readable form (see also column 4, lines 39 through column 5); and any suitable memory circuitry or register for saving any suitable number of random bits to make them available to any variety of applications (column 6, lines 45-67 and column 4, lines 22-40). **Wells et al** discloses circuitry (200) also may be an analog circuitry and be integrated with any other circuitry to provide true random numbers (column 6, lines 20-37). **Wells et al** discloses a hardware random generator using different kinds of random sources and flexible to embody with any other circuitry due to the interface controllers (column 3, lines 15-50 and column 4, lines 60-67). Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine **Hill** and **Wells et al** to provide a system as disclosed in claims 1-2 to benefit of the versatility and features taught by **Wells**. One skilled in the art would have been lead to make such a modification to benefit from the many features in the teaching of **Wells et al** such as I/O controllers to combine any number of integrated circuit devices for generating true random numbers and random sources

Art Unit: 2136

that may comprise of analog circuitry or digital circuitry or both, etc. (column 3, lines 15-50 and column 4, lines 60-67).

As per claim 3, Wells et al discloses the limitation of wherein the processor for receiving the random bit stream comprises: a first processor; and a second processor communicatively coupled to said first processor (see column 4, lines 21-40 and column 12, lines 1-11). Claim 3 is therefore rejected on the same rationale as the rejection of claim 1.

As per claim 4, Wells et al discloses the limitation of wherein the first processor and second processor share said memory (see column 12, lines 1-11 and column 3, lines 15-40). Claim 4 is therefore rejected on the same rationale as the rejection of claim 1

As per claim 5, Hill discloses the limitation of wherein the network connection communicates with an Internet protocol network (see column 2, lines 21-31 and column 25, lines 34-45).

As per claim 6, Hill discloses a client using a personal computer to connect to the server through the Internet through high speed connection. It is obvious to one skilled in the art that the client may use a terminal, laptop or similar device capable of wireless connection as it is well known in the art (see column 5, lines 1-25). Such a modification would have been obvious to one skilled in the art to make the invention suitable to any available network.

As per claim 7, Hill discloses the limitation of comprising a database to store accounting information about the random bit stream (column 10, lines 10-25).

As per claim 11, 16, 17, and 18, Hill discloses validating a user account prior to transmitting the random bits over the network (column 5, lines 30-50 and column 8, lines 44-56) performing accounting operations on the random bit stream to ensure that the remote user is billed for the received random bit stream (column 5, lines 12-50 and column 15, lines 1-18 and column 2, lines 50-63) and confirming that the remote user has received the distributable random bit stream (column 8, lines 17-55).

Claim 12 discloses the same limitation as claim 1 except for combining two same devices to generate the bit stream. **Wells et al** also suggests integrating more than one chipset using interface controllers as disclosed in the rejection of claim 1 and even discloses combining more than one random source (column 3, lines 15-50 and column 4, lines 60-67). This modification is also a design choice and would have required routine skilled in the art to add another source. One skilled in the art would have been motivated to make such modification to use two sources in any suitable manner as suggested by **Wells et al** (column 4, lines 44-67) and since different sources provide different frequencies the random bit streams may be generated with relatively more randomness (column 6, lines 6-15). Claim 12 is also rejected on the same rationale as the rejection of claim 1.

As per claim 15, Hill discloses the limitation of further comprising the step of processing the random bit stream to ensure that successive bits are unbiased (see column 10, lines 25-37).

As per claim 19, Wells et al discloses the limitation of further comprising the step of: encapsulating the random bit stream (see column 2, lines 50-63).

4. **Claims 20-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,236,981 to **Hill** in view of US Patent 5,677,953 to **Dolphin**.

4.1 **As per claims 20-22, Hill** substantially teaches a system for making random numbers available to a remote user in digital form, the system comprising: a computer, input device, a display device communicatively coupled to the computer (see figure 8), the display device comprising: a first window for displaying information about a random bit stream awaiting distribution over a network (see column 8, line 64 through column 8, line 30); a second window for displaying diagnostic information regarding the random bit stream (see column 8, lines 26-31); and window manager for controlling the layout of and communication of data to the first window and the second window while present for viewing on the display device (column 8, line 64 through column 8, line 30); a third window for communicating information to a remote computer (column 7, line 64 through column 8, line 5). In another embodiment, **Hill** discloses a transaction window comprising several windows and the size of the window is configurable (column 12, lines 1-33). A window menu is very well known in the art for interacting between several windows layout and editing using “view menu” and “edit menu” as known in

Art Unit: 2136

MICROSOFT WINDOWS. Therefore, a window manager for controlling the layout of and communication of data to the first window and the second window while present for viewing on the display device would have been an obvious modification to one skilled in the art. One skilled in the art would have been motivated to make such a modification to have more than one window opened, to edit and make changes without closing the opened windows.

Hill does not provide drawings that illustrate the transaction interface to clearly implement the invention. However, using sub-window that shows transaction information is very well known in the art as disclosed in US Patent 5,563,946 to Cooper et al ; **Dolphin** in an analogous art discloses a display device comprising window for displaying information about a random bit stream awaiting distribution over a network and a second window for displaying diagnostic information regarding the random bit stream (see figures 4 and 8-10). (See also column 6, lines 21-67). Therefore it would have been obvious to one skilled in the art at the time the invention was made to implement a window display as taught by **Dolphin**. One skilled in the art would have been motivated to make such a modification to facilitate the transaction by providing a way for a user to interact using a user interface in order to make changes; also, because a user can view the data of the transaction, verifying data for errors is also possible.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as the art discloses many of the claimed features such as more than one window for display and control layout, combining more than one noise source, saving random numbers as files, etc.

Art Unit: 2136

US Patents: 6,581,078 Liardet ; 6,014,650 Zampese; 6,456,984 Demoff et al ;
5,563,946 Cooper et al; 6,563,514 Samar ; 5,530,749 Easter et al.

5.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ce

Carl Colin
Patent Examiner
June 23, 2005


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100